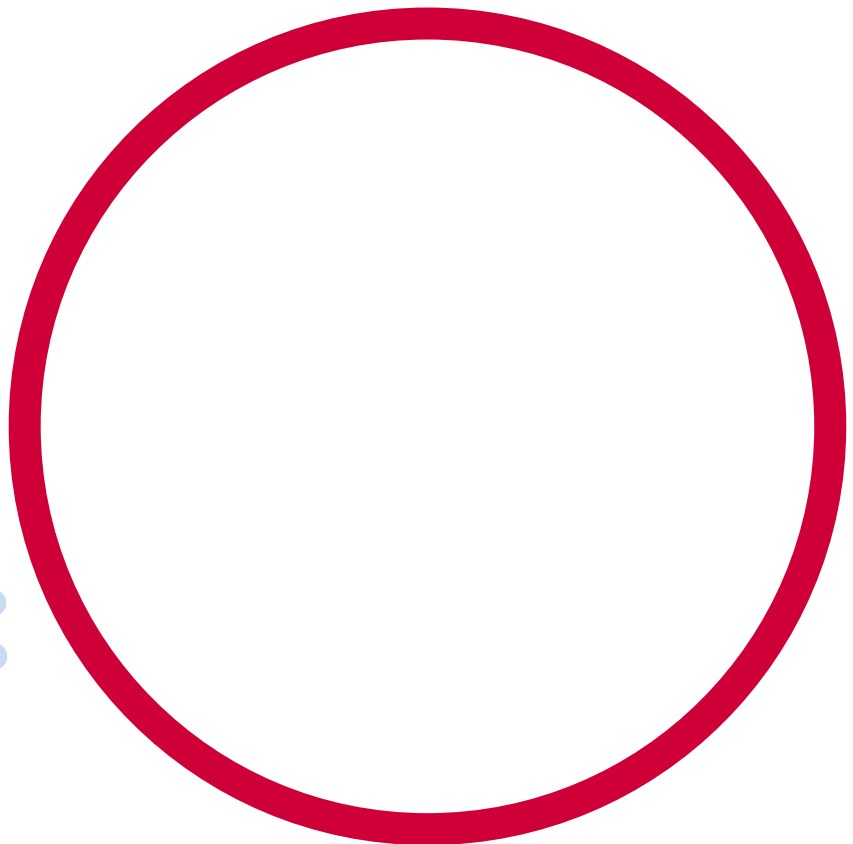
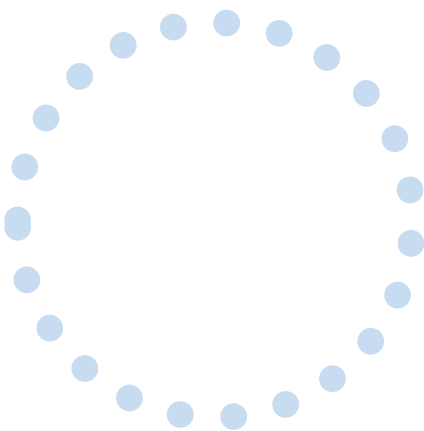
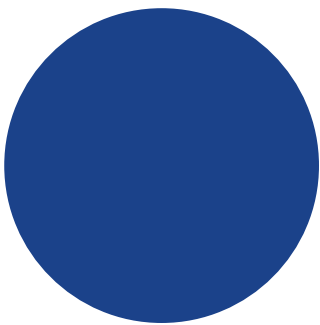


# Report summary: understanding increased enrolments of autism and mental health needs in NSW government schools



This is a NSW Department of Education summary of the full report prepared for the Department by Dr Tamara May and Prof Katrina Williams, Monash University. For a more detailed explanation of the methodology and data sets used, please read the full report.

The NSW Department of Education commissioned researchers from the Department of Paediatrics, Monash University, to complete a report examining the reasons for increased enrolments of students with autism (14.5%) and mental health needs (5.4%) in NSW government schools over the period from 2013 to 2017, as reported in the Disability Strategy (2019). Key internal and external reasons for an increase, and their relative contribution, were explored.

Prevalence figures for 2018 with a 10 year forecast were estimated. The dataset provided by the Department included students receiving Level 1 funding in NSW public schools. In 2013 DoE implemented a new disability approach to funding. There are three levels of funding provided for students with disability. Level 1 comprises targeted (individual student) funding; Level 2 refers to equity loadings for schools; while Level 3 includes base school allocations. No diagnostic information about individual student's disability is recorded for Level 2 and 3 funding.

Of note, the method for identifying students in the Department dataset was different to the method used in the Disability Strategy.

## Key findings

The increase in the prevalence of autism from 2013 to 2018 is due to the identification of students with autism without intellectual disability. The prevalence of students with any level of intellectual disability (regardless of their primary diagnosis) remained stable over the last 8 years.

The increase in the prevalence of mental health needs is likely due to increasing public awareness. The mental health needs category is too broad to understand specific causal factors for the increase.

There is minimal contribution from the explored internal factors to the increase in autism and mental health needs. Three percent of the total students receiving funding for autism, intellectual disability, and mental health needs from 2014-2018 were those who returned to Level 1 funding after being removed in 2013 with the introduction of Level 2 funding.

Student characteristics have changed over the period, with slightly more girls with autism and mental health needs being identified and an increase in Aboriginal and Torres Strait Islander students receiving funding for autism and mental health needs. These changes each make a small contribution to the increase in prevalence of autism.

The impact of the NDIS and changes to the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), could not be confirmed due to too few prior data points and the co-occurring introduction of Level 2 funding in 2013.

Increased autism and mental health needs prevalence likely reflects Australian and international trends of increased prevalence due to growing awareness, increased screening and identification of students with disabilities, and diagnosis of students with normal intelligence and fewer behavioural challenges

## Primary diagnosis

The following prevalence figures were estimated for a primary diagnosis:

There was an increase in primary diagnoses of autism from 0.7% in 2013 to 1.5% in 2018. The average annual prevalence increase in autism (adjusted for increase in total enrolments) was for 2013-2017, 15.8%, and 15.4% from 2013 to 2018.

There was an increase in primary diagnoses of mental health needs from 2013 to 2017 from 0.7% to 0.9%. The average annual prevalence increase in mental health needs (adjusted for increase in total enrolments) was for 2013-2017, 3.3%, and 4.4% from 2013 to 2018.

There was a decrease in primary diagnoses of Intellectual Disability (ID) from 1.9% in 2013 to 1.6% in 2018. The average annual prevalence decrease in ID (adjusted for increase in total enrolments) was for 2013-2017, 2.8%, and 2.8% from 2013 to 2018.

The 10 year prevalence predictions based on a primary diagnosis are:

Primary diagnosis of autism to increase from 1.6% in 2019 to 3.0% of students in 2028

Primary diagnosis of mental health needs to increase from 0.9% in 2019 to 1.2% of students in 2028

## All diagnoses of autism, intellectual disability or mental health

As many students will have more than one disorder (e.g. comorbid autism and intellectual disability) the proportion of students with **any of these diagnoses**, regardless of their primary diagnosis, in NSW public schools was also calculated.

## The following prevalence figures were estimated for any diagnosis:

- The proportion of students in NSW schools who are on the autism spectrum has increased from 1.1% in 2013 to 1.9% in 2018. The average annual prevalence increase (adjusted for increase in total enrolments) was 12.2% from 2013 to 2018.
- The proportion of students in NSW schools with mental health needs has increased from 0.9% in 2013 to 1.3% in 2018. The average annual prevalence increase (adjusted for increase in total enrolments) was 6.4% from 2013 to 2018.
- The proportion of students in NSW schools with any level of intellectual disability has remained stable from 2011-2018 at around 2.4%. The average annual prevalence increase (adjusted for increase in total enrolments) was 0.4% from 2013 to 2018.

## The 10 year prevalence predictions based on any diagnosis is:

- Autism to increase from 2.0% in 2019 to 3.5% of students in 2028
- Mental health needs to increase from 1.3% in 2019 to 1.9% of students in 2028

# The Nationally Consistent Collection of Data

The Nationally Consistent Collection of Data on school students with disability (NCCD) includes all students that required adjustments in schools, and has consistently collected data from all schools since 2015. In 2017, 19.2% of NSW students were reported to receive adjustments. As per this report, in 2017, 3.75% of NSW public school enrolments received Level 1 funding for mental health needs, intellectual disability and autism. As the data collection procedures for the NCCD are being refined it is unclear if all students receiving Level 1 support at this time were captured in the NCCD figure from the same period. The four broad categories of disability from the NCCD cannot be compared to the narrow disorder defined categories captured by Level 1 funding. Further work to explore the overlap of NCCD and Level 1 funding is underway to understand the profile of students captured in the NCCD who are, and are not, receiving Level 1 funding. This work is linked to a new methodology for the allocation of the Low Level Adjustment for Disability equity loading in RAM.

## For internal factors that may have contributed to the increase in Level 1 funding for autism and mental health needs:

Many students have overlapping features of autism, intellectual disability and mental health needs (and other co-occurring disorders). While the proportion of students with intellectual disability (regardless of any other co-occurring disorders) remained stable from 2011 to 2018; the proportion of students with autism without intellectual disability increased over the period 2011 to 2018. Thus, the enrolment of students with ASD, without intellectual disability, was the main contributor to the increase over the period.

The proportion of comorbidity in students with autism also decreased from 73% to 67% from 2013-2018 indicating that students with autism with fewer other problems were increasingly identified over the period.

In 2013 around 15,000 students were removed from level 1 funding with the introduction of Level 2 funding. Approximately 1,432 of these students returned to Level 1 funding from 2014 to 2018 accounting for 1.4% of autism, 0.4% of intellectual disability and 1.3% of mental health needs students over the five year period (3% of the total students receiving funding for autism, intellectual disability and mental health needs from 2014-2018). Thus, returning students contributed only 3% to the increase across these disorders.

There was no indication that teachers completing online autism professional development courses was associated with the increase in autism prevalence.

The change to DSM-5 in 2014 from the DSM-IV-TR for autism could not be confirmed as a cause or correlate of the increase in students with ASD. This was due to the concurrent introduction of Level 2 funding resulting in a large group of students being removed in 2013 and insufficient prior data time points to compare.

Diagnostic switching between any mental health, intellectual disability or autism diagnoses impacted only around 6% of students receiving Level 1 funding support. This indicates that students changing primary diagnosis from intellectual disability to autism or mental health did not make a substantial impact to the increase in ASD and MH needs.

### For student characteristics:

Proportionally more females with autism and mental health needs have been identified over time which has made a small contribution to the increase in the primary diagnosis levels of both categories.

Aboriginal and Torres Strait Islander students were over-represented as having primary diagnoses of autism, intellectual disability and mental health needs relative to the NSW public school population prevalence of Aboriginal students. In 2018 Aboriginal students made up 8% of the NSW public school enrolments but 12% of students with autism, 18% of students with intellectual disability and 29% of students with mental health needs based on primary diagnosis. The proportion of Aboriginal and Torres Strait Islander students with mental health needs has increased 6%, autism 4% and intellectual disability 4% from 2011 to 2018. This has made a small contribution to the increase in mental health and autism prevalence.

### For external factors:

There has been a significant and large international and national increase in autism prevalence and an increase in other Australian states/territories over the period, as demonstrated by health, education and research data. Thus, the increase in ASD prevalence in NSW public schools reflects an international and national trend and one

found in other states. The increase in ASD prevalence has been attributed in part to individuals without intellectual disability being identified who have lower levels of symptoms and fewer comorbidities, as reported in other national and international data. The NSW findings of the increase in autism being mostly students without intellectual disability is consistent with these broader trends.

There has similarly been an increase in mental health needs prevalence in Australia and internationally and the increase in NSW public schools likely reflects this national trend.

There has been a large increase in public awareness in autism over the period which has likely contributed to the national increase in prevalence and to the increase in NSW public schools.

The NDIS impact could not be confirmed because of the removal of students from Level 1 funding coinciding with the introduction of the NDIS in the Hunter region in 2013.

## Limitations

Missing disability information about primary and other diagnoses was derived by NSW Department of Education based on support class type and Factors of Need. Prediction and association statistics need to be interpreted with caution given the small number of data points used to make calculations. The mental health needs category includes all DSM-IV-TR psychiatric diagnoses. It does not provide the required granularity to explore potential specific diagnostic categories that might be contributing to the increase, such as a breakdown of internalising versus externalising disorders.

For further information, please contact the Disability Strategy Implementation team:  
[disability.strategy@det.nsw.edu.au](mailto:disability.strategy@det.nsw.edu.au)